

Amendments to the Claims:

1. (Currently Amended) A system for cleaning a contaminated matter comprising dioxins by decomposing the dioxins in the contaminated matter, wherein the system comprises:
a centrifuge operable to subject crushed cells of Bacillus midousuji, said cells having been cultured in the presence of a chlorinated aromatic compound that has a substituent comprising an oxygen atom bonded to an aromatic ring and having a chloro group bonded to an aromatic ring, to centrifugation to separate the crushed cells into a pellicle fraction comprising crushed cells containing a pellicle, and a cytoplasm fraction comprising crushed cells containing cytoplasm; and

a reaction tank holding at least:

at least one of crushed cells and fractions of the crushed cells comprising a the pellicle fraction of the crushed cells of Bacillus midousuji cultured in the presence of a chlorinated aromatic compound which has a substituent comprising an oxygen atom bonded to an aromatic ring and having a chloro group bonded to an aromatic ring separated in the centrifuge, wherein the at least one of crushed cells and fractions of the crushed cells comprising the pellicle of the crushed cells of Bacillus midousuji breaks the ether bond of the structure of the dioxins;
the contaminated matter; and
an aqueous medium.

2. (Original) The system according to claim 1, wherein the system comprises a filtration means for separating the aqueous medium and a solid matter from a matter held in the reaction tank to remove the aqueous medium.

3. (Original) The system according to claim 1, wherein the system comprises:
a seclusion means for secluding a source of the contaminated matter;
a fluid production means for producing a fluid comprising the contaminated matter by soaking the contaminated matter from the source of the contaminated matter in at least water;

and

a fluid transport means for transporting the fluid comprising the contaminated matter toward the reaction tank.

4. (Original) The system according to claim 2, wherein the system comprises:

a seclusion means for secluding a source of the contaminated matter;

a fluid production means for producing a fluid comprising the contaminated matter by soaking the contaminated matter from the source of the contaminated matter in at least water;
and

a fluid transport means for transporting the fluid comprising the contaminated matter toward the reaction tank.

5. (Original) The system according to claim 3, wherein the fluid production means is a means of washing the contaminated matter for washing the contaminated matter down by jetting at least water to the source of the contaminated matter.

6. (Original) The system according to claim 4, wherein the fluid production means is a means of washing the contaminated matter for washing the contaminated matter down by jetting at least water to the source of the contaminated matter.

7. (Currently Amended) A method of cleaning a contaminated matter comprising dioxins by decomposing the dioxins in the contaminated matter, wherein the method comprises:

crushing cells of Bacillus midousuji that were cultured in the presence of a chlorinated aromatic compound that has a substituent comprising an oxygen atom bonded to an aromatic ring and having a chloro group bonded to an aromatic ring, to obtain crushed cells of Bacillus midousuji;

subjecting the crushed cells of Bacillus midousuji to centrifugation to separate the crushed cells into a pellicle fraction comprising crushed cells containing a pellicle, and a cytoplasm fraction comprising crushed cells containing cytoplasm; and

~~mixing at least one of crushed cells and fractions of the crushed cells comprising a pellicle of Bacillus midousuji cultured in the presence of a chlorinated aromatic compound which has a substituent comprising an oxygen atom bonded to an aromatic ring and having a chloro group bonded to an aromatic ring~~ the pellicle fraction, the contaminated matter, and an aqueous medium, wherein ~~the at least one of crushed cells and fractions of the crushed cells comprising the pellicle of Bacillus midousuji~~ breaks the ether bond of the structure of the dioxins.

8. (Original) The method according to claim 7, wherein the method comprises:
separating a solid matter and the aqueous medium from the mixture to obtain the aqueous medium in which the solid matter is removed.

9. (Currently Amended) The method according to claim 7, wherein the method comprises:

secluding a source of the contaminated matter;
soaking the contaminated matter generated from the secluded source of the contaminated matter in water; and
~~mixing at least one of the crushed cells and the fractions of the crushed cells~~ the pellicle fraction with the water comprising the contaminated matter.

10. (Currently Amended) The method according to claim 8, wherein the method comprises:

secluding a source of the contaminated matter;
soaking the contaminated matter generated from the secluded source of the contaminated matter in water; and
~~mixing at least one of the crushed cells and the fractions of the crushed cells~~ the pellicle fraction with the water comprising the contaminated matter.

11. (Currently Amended) The method according to claim 9, wherein ~~at least one of the crushed cells and the fractions of the crushed cells are~~ the pellicle fraction is mixed with water slurry comprising the contaminated matter discharged through one method of a high pressure water washing method for washing the contaminated matter down by jetting water under high pressure to the source of the contaminated matter and a wet sandblast method for washing the contaminated matter down by jetting water and abrasive grains under high pressure to the source of the contaminated matter.

12. (Currently Amended) The method according to claim 10, wherein ~~at least one of the crushed cells and the fractions of the crushed cells are~~ the pellicle fraction is mixed with water slurry comprising the contaminated matter discharged through one method of a high pressure water washing method for washing the contaminated matter down by jetting water under high pressure to the source of the contaminated matter and a wet sandblast method for washing the contaminated matter down by jetting water and abrasive grains under high pressure to the source of the contaminated matter.

13. (Currently Amended) A preparation for decomposing dioxins, the preparation being prepared by a process comprising the steps of crushing cells of Bacillus midousuji that were cultured in the presence of a chlorinated aromatic compound that has a substituent comprising an oxygen atom bonded to an aromatic ring and having a chloro group bonded to an aromatic ring, and subjecting the crushed cells of Bacillus midousuji to centrifugation to separate the crushed cells into a pellicle fraction comprising crushed cells containing a pellicle, and a cytoplasm fraction comprising crushed cells containing cytoplasm, the preparation comprising at least one of crushed cells and fractions of the crushed cells which comprise a pellicle of Bacillus midousuji cultured in the presence of a chlorinated aromatic compound having a substituent comprising an oxygen atom bonded to an aromatic ring and having a chloro group bonded to an aromatic ring the pellicle fraction, wherein the at least one of crushed cells and fractions of the crushed cells comprising the pellicle of Bacillus midousuji, which breaks the ether bond of the structure of the dioxins.

14. (Previously Presented) The system according to claim 1, wherein the *Bacillus midousuji* is cultured by a process comprising: mixing one of dioxins, a dioxin-containing substance, and chlorinated phenol with a medium comprising a nutrient source of *Bacillus midousuji*; supplying oxygen to the medium; and controlling the temperature of the medium to 62° C or above, which allows activity of the *Bacillus midousuji*.

15. (Previously Presented) The method according to claim 7, wherein the *Bacillus midousuji* is cultured by a process comprising: mixing one of dioxins, a dioxin-containing substance, and chlorinated phenol with a medium comprising a nutrient source of *Bacillus midousuji*; supplying oxygen to the medium; and controlling the temperature of the medium to 62° C or above, which allows activity of the *Bacillus midousuji*.

16. (Previously Presented) The preparation for decomposing dioxins according to claim 13, wherein the *Bacillus midousuji* is cultured by a process comprising: mixing one of dioxins, a dioxin-containing substance, and chlorinated phenol with a medium comprising a nutrient source of *Bacillus midousuji*; supplying oxygen to the medium; and controlling the temperature of the medium to 62° C or above, which allows activity of the *Bacillus midousuji*.

17. (New) A process for preparing a composition for decomposing dioxins, comprising the steps of:

(a) culturing *Bacillus midousuji* by mixing one of dioxins, a dioxin-containing substance, and chlorinated phenol with a medium comprising a nutrient source of *Bacillus midousuji*, supplying oxygen to the medium, and controlling the temperature of the medium to 62° C or above, which allows activity of the *Bacillus midousuji*;

(b) crushing cells of *Bacillus midousuji* cultured in step (a), to obtain crushed cells of *Bacillus midousuji*;

(c) subjecting the crushed cells of *Bacillus midousuji* obtained in step (b) to centrifugation to separate the crushed cells into a pellicle fraction comprising crushed cells containing a pellicle, and a cytoplasm fraction comprising crushed cells containing cytoplasm;

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and

(d) preparing the composition using the pellicle fraction obtained in step (c).